Mood Disorders

Episodic disorders (severe, recurrent)
Major depression (unipolar)
Bipolar (manic depression)

Chronic disorders (mild, last 2 years or more)
Dysthymia
Cyclothymia

History: Oldest disorders?

- “Melancholia” (black bile) introduced by Egyptians in 2600 BC
- Hippocrates (400 BC) noted that black bile and phlegm influence the brain by “darkening the spirit and making it melancholy”
- Aretareus (120 AD) noted the association between melancholia and mania
- Kraepelin (1896) identified manic depression as an illness characterized by severe mood swings that are relatively independent of social and psychological forces

Background I

Epidemiology
- Bipolar disorder (BPD)
  - Prevalence ~1%
  - No clear gender difference
  - Age of onset ~20
  - Prognosis poorer than for MDD
- Major depressive disorder (MDD)
  - Prevalence
    - M: 5-12%
    - F: 10-25%
  - Gender ratio similar across cultures
  - Age of onset ~25
  - **MDD is common and debilitating**
- Age of onset is shifting downward markedly

Background II

- Suicide risk ~ 15%
- Depression is one of the most co-morbid of all disorders (also co-occurs with many medical illnesses)
- Dysthymia and cyclothymia are risk factors for MDD and BPD
- Depressive episodes have a typical duration of four months and can go untreated
- Manic episodes are shorter & almost always treated
- 60% of those having a depressive first episode can be expected to have subsequent episodes (risk higher if female)
- ~100% (!) of those with BPD have recurrence
- **Economic costs associated with mood disorders second only to those associated with cardiovascular disease**
- Psychosurgery an option for intractable MDD

Major Depressive Episode

- At least 5 of the following symptoms present for at least 2 weeks - one of the symptoms is (1) depressed mood or (2) loss of interest or pleasure

1. Depressed mood
2. Loss of interest or pleasure (anhedonia)

- Significant weight loss/gain (e.g. 5% change/month)
- Insomnia or hypersomnia nearly every day
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of worthlessness or excessive/inappropriate guilt
  - Can be delusional
- Diminished ability to think or concentrate, indecisiveness
- Recurrent thoughts of death (including suicide ideation/intent)

Types

Recurrent (Unipolar)
Psychotic
- Mood congruent
- Mood incongruent

Melancholic – severely anhedonic & lack of reactivity to pleasurable stimuli + biological sx (worse in morning, early morning insomnia, significant weight loss, marked agitation/retardation), excessive guilt

Seasonal affective disorder – “winter depression”

Types of Depressive Disorder?

- Two fairly common causes of depression that are generally not considered mood disorders are
  - Bereavement
  - Postpartum blues

Dysthymic Disorder

- Shares many of the symptoms of MDD, but symptoms are milder and remain relatively unchanged over longer periods of time (sometimes 20-30 years)
- Less symptoms are required (2 or more)
- Persistently depressed mood that lasts for at least 2 years
- Mean age of onset is early 20's
- Often leads to MDD (~70%) – when both are present = double depression
- About 10% of MDD cases are preceded by dysthymia

Manic episode

Euphoric or irritable mood- persists 1 wk

- Inflated self esteem, grandiosity
  - Can be delusional
- Decreased need for sleep
- Pressure to keep talking, more talkative than usual
- Flight of ideas, feels like thoughts are racing
- Distractibility
- Increase in goal directed activity level or psychomotor agitation
- Involved in pleasurable activities that have high potential for harmful consequences (Impaired judgment)

Bipolar Disorder

- Defined by presence of at least one manic episode
- Unipolar mania may exist (15% of cases) but is diagnosed as bipolar disorder
- 60-70% of manic episodes occur close in time to depressive episodes
- "Mixed" episodes possible
- Rapid cycling possible (4 episodes/year)
- Psychotic features possible

Hypomania

- Like mania but less severe
- Lasts at most 4 days
- No major impairment – but:
  - Clear (observable to others) change in functioning that is uncharacteristic of person when not symptomatic
- No hospitalization, no psychotic features
- Hypomania + major depressive episode = bipolar II disorder
- Hypomania a factor in poor medication compliance and creativity

Cyclothymia

- Dysthymic and hypomanic periods cycle over two year period (1 year in kids) with no more than 2 months of normal mood
- Prevalence .4-1%
- 1/3 to ½ BPDs are premorbid "cyclothymes"
- Equally common in men and women

Mood Disorders: Integrative Summary

Severe depressive episode	Major Depressive Disorder
Minor depressive episodes and symptoms for >2 yrs	Dysthymic Disorder
Minor depression > 2 yrs and one major depressive episode	"Double Depression"
At least 1 manic episode	Bipolar I
At least 1major depression and 1 hypomanic episode	Bipolar II
Minor depression and hypomania for > 2 yrs	Cyclothymic Disorder

Genetic diathesis

- If you have a mood disorder, likelihood that you have an affected relative is 2-3 times the population rate
- BPD seems to have a stronger genetic diathesis than MDD
  - Twin studies suggest BPD is one of the most heritable DSM disorders
- Recurrent unipolar depression appears to be more heritable than depression characterized by one or a few episodes
  - Severity effect?

Mood Disorders and Life Stress

- Stressful life events related to onset and recurrence of both depression and mania
  - Many cases "endogenous"
  - Recurrent disorders (especially BPD) often take on a life of their own

Why might studies find life stress to be associated with depression?

- Mood may bias recall
- Mood disturbance may cause negative events
- Life stress proximal cause of depression

Psychosocial Treatment con't

Behavior Therapy

- Derived from Lewinsohn's behavioral theory of depression
- Depression follows a loss (reinforcement reduced) coupled with reinforcement for depressive behavior
- Treatment focuses on increasing person's opportunities to receive appropriate reinforcements

Interpersonal Psychotherapy

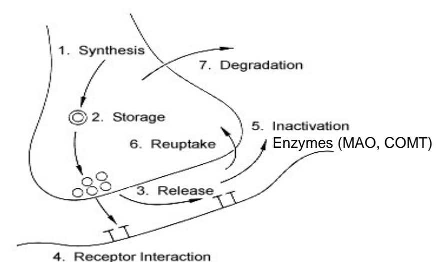
- Focuses on resolving problems in existing relationships and learning how to form new interpersonal relationships

Psychosocial Treatments

Cognitive-Behavioral Therapy (CBT)

- Derived from Beck's cognitive theory of depression (expanded and modified by others)
- People get depressed because they have irrational depressogenic thoughts about self, world, and future
- Clients are taught to monitor their thought processes and recognize depressive errors in thinking
- Treatment involves correcting cognitive errors and substituting less depressive thoughts (e.g., my thoughts are not facts!)
- Behaviorally oriented homework exercises also included

Mechanisms of Drug Action



Biological Treatment: Depression

Neurotransmitters: DA, norepinephrine, serotonin

- Monoamine Oxidase Inhibitors (MAOIs, e.g., Nardil) – block neurotransmitter metabolism
- Tricyclic Antidepressants (e.g., imipramine) – block reuptake
- Selective Serotonin Reuptake Inhibitors (SSRIs, e.g., Prozac) and Combination Serotonin-Norepinephrine Reuptake Inhibitors (e.g., Effexor)
- Stimulants (e.g., Ritalin, Dexedrine) – stimulate receptors
- Unless medication continued for 6+ months, relapse very likely
- Electroconvulsive Therapy (ECT; also effective for mania)
- Full spectrum light therapy

Antidepressant effectiveness

Drug	Drug Efficacy		Drug-Placebo	
	Inpatient	Outpatient	Inpatient	Outpatient
Tricyclics	50.0%	51.5%	25.1%	21.3%
SD	(6.5)	(5.2)	(11.5)	(3.9)
N	[33]	[102]	[8]	[46]
Monoamine oxidase inhibitors (MAOIs)	52.7%	57.4%	18.4%	30.9%
SD	(9.7)	(5.5)	(22.6)	(17.1)
N	[14]	[21]	[9]	[13]
Selective serotonin reuptake inhibitors (SSRIs)	54.0%	47.4%	25.5%	20.1%
SD	(10.1)	(12.5)	(21.7)	(7.8)
N	[8]	[39]	[2]	[23]

Note: The percentage shown in the *Drug Efficacy* column is the anticipated percentage of patients provided the treatment shown who will respond. The *Drug-Placebo* column shows the expected percentage difference in patients given a drug versus a placebo based on direct drug-placebo comparisons in trials that included at least these two cells. The numbers in parentheses are the standard deviations of the estimated percentage of responders. The bracketed numbers give the number of studies for which these estimates are calculated.

Source: Adapted from Depression Guideline Panel, 1993, April

- Drug effectiveness higher (65-70%) if dropouts not counted as treatment failures
- Side effects important consideration

From Depression Guideline Panel, 1993

Best treatment

- Medications + psychosocial therapy
- Psychosocial therapies seem especially helpful in reducing relapse

Biological Treatment: Mania

Mood stabilizers – prophylactics, reduce severity of relapse episodes more than frequency

- Lithium
- Older anticonvulsants: Tegretol (carbamazepine) Depakote (divalproex sodium)
- Newer anticonvulants: Neurontin (gabapentin), Lamictal (lamotrigine)
- Calcium channel blockers: Calan (verapamil)
- Work well for about half; 80–90% relapse promptly if stop lithium/anticonvulsant

Antipsychotics – acute mania, psychosis